CASE HISTORIES OF ATTACKS BY THE SOUTHERN CASSOWARY IN QUEENSLAND

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The Southern Cassowary is Australia's largest bird and is capable of causing serious injuries to humans. The incidence of cassowary attacks in Australia was reviewed recently by Kofron (1999). The eight recorded incidents in which humans were seriously injured by Southern Cassowaries are examined, and also other related incidents of special interest. The eight seriously-injured victims suffered puncture wounds, lacerations, cuts, and/or broken bone, one of them subsequently dying. Five of the eight attacks were by cassowaries that had been fed previously by people, and in the single fatal cassowary attack recorded in Australia the victim was trying to kill the cassowary. Also, four of the eight seriously-injured victims were crouching or lying on the ground. Consequently a person encountering a cassowary should not crouch down, which puts a person's head and vital organs in closer striking range of the cassowary's foot. Rather, a person should remain standing and move behind a tree, or quickly leave the area but without turning one's back. Children should be supervised and kept at safe distances from cassowaries, especially cassowaries habituated to people. People should be aware that cassowaries can be dangerous in certain situations.

| Southern Cassowary, Casuarius johnsonii, Queensland, attacks.

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The Southern Cassowary (Casuarius casuarius johnsonii, family Casuariidae) is endemie to the tropical rainforests of northeastern Queensland. This species is Australia's largest bird and holds a reputation for being dangerous. Cassowaries and Ostriches are the only birds worldwide that have eaused human deaths by physical attack. Incidents occur every year in Queensland, most at Mission Beach (110km SE Cairns) but previously also at Lake Barrine (39km SW Cairns) and Mount Whitfield in Cairns.

The incidence of eassowary attacks in Oueensland was reviewed recently by Kofron (1999), who reported on data for 221 attacks against humans and domestie animals. One hundred fifty attacks were against humans, 75% of these by cassowaries fed previously by people. The feeding of eassowaries appears to change their natural behaviour, making them bold and aggressive. Vietims were ehased or charged in 71% of the incidents, and kicked in 15%. Less frequent actions included pushing, pecking, jumping on, butting with the head and snatching food. The eassowaries appeared to be expecting or solieiting food from humans (73% of the ineidents); defending food (5%); and defending themselves (15%) or their chicks or eggs (7%). The purpose of the present paper is to examine the eight recorded incidents in which humans were seriously injured, and also other incidents of special interest, with a view to identifying the hazards and minimising the risks in humaneassowary interactions.

METHODS

l questioned and interviewed persons likely to have knowledge of or experiences with eassowaries (e.g. rangers, field workers, farmers, veterinarians, wildlife earers). In addition, I examined official records of the Queensland Parks and Wildlife Service and the Queensland Police Service, and also newspaper reports. All information presented here is based on first person and eyewitness accounts, except one ineident known only from two newspaper reports. An injury was considered serious if it required treatment by professional medical personnel, and these included deep puncture wounds, lacerations and cuts needing stitches, and fractured bone. Where possible, I spoke with the vietims and the medical personnel.

RESULTS

ATTACKS TO HUMANS RESULTING IN SERIOUS INJURIES. Eight attacks by wild eassowaries resulted in serious injuries to humans in the following parts of the body: throat; buttocks; chest; serotum, chest and forearm;

upper arm; thigh and forehead; lower leg; and middle finger. One victim subsequently died. The cassowaries kicked or jumped on the victims, four which were crouching or lying on the ground (one tripped, one knocked to the ground). In three of these attacks the cassowaries appeared to be soliciting food and in three attacks acting in self-defence; but two of the attacks remain unexplained.

Boy killed near Mossman, puncture wound in neck, 1926. On 6 April 1926, two dogs and two boys (Phillip McLean 16 years, Granville McLean 13) attacked a cassowary at their paddock near Mossman (67km NW Cairns), striking the bird and trying to kill it. The cassowary kicked one dog and the younger boy, who stumbled away, but the other dog and boy pressed on with their attack. When the cassowary advanced on the older boy, he ran but tripped, falling to the ground face upwards. The eassowary jumped on him, its spike-like claw penetrating the boy's neck (puncture wound 1¹/₄ em diameter) and severing a blood vessel. The boy got up and ran, but soon collapsed and died from loss of blood.

Woman kicked on Mount Whitfield track, wound in buttock, 1988. Two newspaper articles published on 13 March 1988 (Anonymous, 1988a) and 15 March 1988 (Anonymous, 1988b) reported that a woman was attacked by a cassowary at Mount Whitfield, and the wound in her buttock required stitches. Although one article claimed that the woman was bitten by the cassowary, it is likely that she was kicked. The recent cassowaries at Mount Whitfield were fed by people.

Man kicked at Julatten, puncture wound in chest, 1990. On 2 October 1990, Barry and Jenny Tuite walked along Clacherty Road in Julatten (57km) NW Cairns), bound by rainforest, orchards. paddocks and houses. They did not notice the cassowary at the rainforest edge until only several metres distant from it. They walked away, but the bird followed for about 50m. Suddenly the cassowary charged, leapt and kicked the man in his chest (puncture wound 12cm deep), knocking him to the ground. As he lay unconscious in a drain, the cassowary attempted to kick him again. The woman shouted: the cassowary advanced towards her, and she ran up an embankment. The injured man regained consciousness and also climbed the embankment. The woman ran to a nearby farmhouse for help, with assistance arriving as the cassowary again was confronting the injured man. The bird moved away only a short distance as Mr Tuite was assisted into a motor vehicle. When the cassowary approached again, the farmer shot and killed it.

The reason for the attack is unknown. No dogs or cassowary chicks were involved, and residents denied feeding the female cassowary, although one person alleged the contrary. One day prior to the attack, two people on horses were chased by a cassowary along Clacherty Road; and one or two weeks prior in Julatten, cows were chased by a cassowary.

Man kicked at Cape Tribulation, lacerations in forearm, chest and scrotum, 1991. On 11 September 1991 at 02:00, Bodo Wintergerst walked out of his caravan at Bailey's Creck (88km NW Cairns) to toilet in the rainforest. He claims that a cassowary kicked him while squatting, lacerating his forearm, chest and groin. The linear cuts required 9 stitches: right forearm 2, right upper chest 3 and left side of scrotum 4. The alleged attack cannot be explained.

Woman kicked on Mount Whitfield track, puncture wound in upper arm, 1994. On 20 December 1994, Joanne Edwards was walking the Blue Arrow Track at Mount Whitfield when a cassowary approached her from behind. The bird stopped 5m away and preened its chest feathers. The woman stepped backwards, and the cassowary advanced. The woman crouched down and covered her head with an arm. The bird kicked Ms Edwards in the arm, knocking her to the ground, and then kicked her several times more in the arm and stomach. Eventually the cassowary walked away. The woman received a puncture wound in the upper arm that required 10 stitches.

Woman kicked on Mount Whitfield track, puncture wound in thigh, lacerations in forehead, 1996. On 30 March 1996, Jill Turner was walking the Blue Arrow Track at Mount Whitfield when a cassowary approached her from behind. The woman continued walking, and the bird followed. Eventually she stepped off the track to allow the cassowary to pass, but it stopped at 1m distance. The eassowary briefly looked at the woman and then kicked Ms Turner in the thigh, knocking her to the ground. The cassowary quickly kicked her again in the forehead and twice in the back. The cassowary sat down next to her (2m distance) for 10 minutes; then got up, walked 4m and sat down for 30 minutes; and then got up and walked away down the track. The woman received puncture wounds in her thigh and lacerations in her forehead that required two and nine stitches, respectively.

Man kicked at Stratford, Mount Whitfield, fraetured lower leg, 1996. On 2 November 1996, James Barry saw two dogs attacking a cassowary on the residential lot adjacent to his, one biting the bird's neck and the other its leg. As he pulled one dog away, the cassowary kieked Mr Barry in the shin, causing a simple fracture of his lower leg. The cassowary was obviously acting in self defence (it subsequently died), not realising that Mr Barry was attempting to help it. This bird had a history of being fed by people.

Man kicked at Etty Bay, cut on finger, 1999. On 25 December 1999, George Newport saw two children on bicycles confronted by a cassowary at his caravan park. To assist the children and shoo away the bird, Mr Newport approached the cassowary with an umbrella, holding it with two hands in front while opening and closing several times, which had proven effective on previous occasions. As Mr Newport neared the cassowary, the bird jumped up and kicked the umbrella, also striking the man's hand. The cassowary then walked away. Mr Newport suffered a cut to his middle finger that required five stitches. This bird had a history of being fed by people.

SOME OTHER ATTACKS TO HUMANS. Man kieked at Mission Beach, 1986. In one incident in 1986 at Mission Beach, a tourist was viewing a eassowary. The bird approached the person to within 1m, apparently expecting to be fed. Instead of offering food, the tourist squatted down to photograph the eassowary. Suddenly the bird kieked the person in the stomach, knocking him to the ground.

Cassowary jumped up and down on man at Aeroglen, Mount Whitfield, 1991. In November 1991, a friend was visiting Joseph Collins at his residence on Mount Whitfield. The fig tree in his yard was frequented by a cassowary, and the bird was feeding during the visit. The two men viewed the cassowary at close quarters, pieked up figs and fed it by hand. The visitor moved backwards to photograph the bird, lost balance and fell to the ground. The cassowary quickly jumped onto the prone man's back, and then jumped up and down on him about 10 times. This action of the cassowary appears to have been in defence of its food and feeding area.

Man head-butted on Mount Whitfield track, 1995. On 29 October 1995, three hikers on the Blue Arrow Track at Mount Whitfield encountered a cassowary preening itself. The hikers went off the trail intending to circumvent the bird, but upon their emerging back onto the track the

cassowary was waiting for them only 2m away. The cassowary lowered its head, charged and butted Clive Skarott in the back. While falling he grabbed a narrow tree trunk, the momentum spinning him around the tree and back again to face the cassowary. The man quickly retrieved an apple from his pocket and offered it to the cassowary, which the bird ate from hand. The man offered a second apple, which was also eaten. A third apple was offered, but then rolled down the slope, which the cassowary pursued.

Boy pecked on testicles at Aeroglen, Mount Whitfield, 1995. In another incident in October 1995 at Mount Whitfield, the son of Ann Keating went outdoors to play. A cassowary was feeding at a fig tree in their garden, which the bird frequented regularly. The little boy (age four) elimbed onto a fence post about 1 ½ m height, and the cassowary walked to him. The cassowary pecked the boy, striking him on the testicles. I attribute this action of the cassowary to defence of its food and feeding area.

SERIOUS INJURIES TO DOMESTIC ANIMALS. Although injuries to dogs are included here, the dogs were usually the aggressors and were threatening the eassowaries. In 29 of 35 recorded incidents, the cassowaries were acting in self defense because they were being attacked by dogs. Conversely and most importantly, many eassowaries have suffered injuries and even death because of dogs, which will be the subject of a separate paper.

Dog killed at the Tully River, puncture wound in chest, 1976. One day in 1976 Les Henry drove with his dog to the Tully River (124km S Cairns). Upon getting out of the motor vehiele, the dog sighted a eassowary, then barked and ran to it. As the dog drew near, the eassowary took several steps toward the dog, and then kieked the dog in its ehest making a deep puneture wound. The dog died shortly after.

Dog killed at Bramstom Beach, ruptured intestine, 1995. In one incident in 1995 at Bramston Beach (54km SE Cairns), a dog was chasing a cassowary. The cassowary turned to confront the dog, and then kicked the dog in its belly. Although there was no puncture wound, there was massive bruising. The dog subsequently died, apparently from a ruptured intestine.

20 dogs kieked, puncture wounds, lacerations and cuts, 1976-1996. Six veterinarians in Innisfail (72km SE Cairns), Mission Beach and Tully treated 20 other dogs with puncture wounds,

lacerations and cuts caused by cassowaries. All injuries were in the torso (10 in the chest), and each dog required 2-20 stitches.

Horse kicked at South Mission Beach, laceration in buttock, 1987. Rangers Brent Vincent and Karl Siener conducted a situation assessment of a race horse that had been kicked by a cassowary at South Mission Beach in 1987. This particular cassowary was being fed fruit (pineapples, bananas, apples) on the adjacent farm as part of the wildlife rescue effort following Cyclone Winifred. While the horse was feeding at its own trough, a cassowary kicked the horse twice, in its ribs and buttock. The horse suffered a deep laceration about 18cm long in the upper thigh that required stitches.

DISCUSSION

Eight attacks against humans resulted in serious injuries and subsequently one death, caused by cassowaries kicking or jumping on victims. Five of these eight attacks were by cassowaries that had been fed previously by people. In the single fatal cassowary attack recorded in Australia, the victim was trying to kill the cassowary. In consideration of all the data, I conclude that feeding cassowaries changes their natural behaviour, making them bold and often aggressive towards humans. Cassowaries that are fed become habituated to humans, subsequently recognising humans as a source of food. For example, of the 90 cassowary attacks recorded at Mount Whitfield (Kofron, 1999), I suspect that no more than four cassowaries were involved, and some of the serious injuries were probably by the same cassowary.

Four of the eight human victims that suffered scrious injuries were crouching or lying on the ground, and 22 dogs were scriously injured when kicked. Consequently a person eneountering a cassowary should not crouch down, which puts a person's head and vital organs in closer striking range to the cassowary's foot. Rather, a person should remain standing and move behind a tree, or quickly leave the area but without turning

one's back. Children should be supervised and kept at safe distances from cassowarics, especially cassowarics that are habituated to people.

Much of the Southern Cassowary's tropical rainforest habitat is now highly fragmented, and human-cassowary interactions will continue to occur, especially in the Mission Beach/Tully/Innisfail area. People must be aware that cassowaries are capable of causing serious injuries, and they can be dangerous in certain situations.

The Southern Cassowary is an endangered species, and one of the threatening factors is dogs. Owners should not allow dogs to roam at large because of their impact on native Australian wildlife, including cassowaries.

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The views expressed in this paper are those of the author and do not necessarily reflect those of the Queensland Parks and Wildlife Service or those of the Queensland Government.

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